

Attorney Docket No. P08553-US2

**IN THE CLAIMS**

1-4. (Canceled)

5. (Previously Amended) A method of encrypting information transmitted between a fixed network and a mobile station in a time division multiple access (TDMA) mobile radio system, wherein information is divided into at least two blocks and transmitted in at least two time slots in each frame in a frame sequence, said method of encrypting information comprising the steps of:

a) forming a pseudo-random sequence from an encryption key and an ordinal number of the frame in which the information is transmitted in accordance with an encryption algorithm;

b) forming a modified pseudo-random sequence from said pseudo-random sequence, in dependence on the ordinal number of the time slot within which the information block that is encrypted with the modified pseudo-random sequence shall be transmitted, in accordance with a first algorithm; and

c) performing a logic operation between said modified pseudo-random sequence and each block of non-encrypted information.